**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 13 May 2023 |
| Team ID | NM2023TMID14698 |
| Project Name | Deep learning Model for Detecting diseases in tea leaves |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Small, pinhole-size spots are initially seen on young leaves less than a month old. As the leaves develop, the spots become transparent, larger, and light brown.  After about 7 days, the lower leaf surface develops blister-like symptoms, with dark green, water-soaked zones surrounding the blisters.  Following release of the fungal spores, the blister becomes white and velvety.  Subsequently the blister turns brown, and young infected stems become bent and distorted and may break off or die. |
|  | Idea / Solution description | Leaves develop lesions that are roughly circular, raised, and purple to reddish-brown. The alga may spread from leaves to branches and fruit.  Most algal spots develop on the upper leaf surface.  Older infections become greenish-gray and look like lichen. Cephaleuros usually does not harm the plant. |
|  | Novelty / Uniqueness | The cultivated plant specielize Camellia sinensis ( (L.) O.  Cross Compatibility. Compatibility between species within the genus Camellia has been used...  Green tea is sourced from Camellia sinensis (L.) O.  Botanical Identification. The tea plant was first described taxonomically in 1753. |
|  | Social Impact / Customer Satisfaction | Generally, foliar diseases directly affect the harvest, while stem and root diseases influence the survival of tea plants. Blister blight, gray blight ,brown blight ,twig dieback, stem cankers, and roots. |
|  | Business Model (Revenue Model) | As the sports grown and turn brown or gray, concentric rings with scattered, tiny black dots become visible and eventually the dried tissue falls ,leading to defoliation. |
|  | Scalability of the Solution | Another advantage of using that the plant diseases can be identified at early stage or the initial stage. |